

Applicant : McKerracher et al.  
Serial No. : 09/184,572  
Filed : November 2, 1998  
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### REMARKS

#### Status of the claims

Claims 25-29, 32 and 33 are pending in this application, claims 1-24, 30 and 31 having been cancelled. Claims 32 and 33 are presently under consideration in this application, claims 25-29 having been withdrawn as allegedly being drawn to separate inventions.

#### Priority

In response to the comments in the Office Action (page 2, paragraph 5), Applicants submit herewith a certified copy of Canadian application no. 2,214,841. Applicants submit thus that the priority date (October 31, 1997) of the instant application is properly established.

#### Claim objection

In response to the comments on page 2, paragraph 6, of the Office Action, Applicants have amended claim 33 to make it properly dependent on claim 32.

#### The 35 U.S.C. §112, first paragraph, rejection

Claim 33 stands rejected as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention.

From the comments on page 3, lines 13-20 of the Office Action, Applicants understand the Examiner's position to be that the specification does not provide a written description of a recombinant ADP-ribosyl transferase other than that from *Clostridium botulinum*. While disagreeing with this position, in order to expedite prosecution of the instant application, Applicants have amended claim 33 to specify that the recombinant ADP-ribosyl transferase is recombinant *C. botulinum* ADP-ribosyl transferase.

In light of the above consideration, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. §112, first paragraph.

The 35 U.S.C. §112, second paragraph, rejections

Claims 32-33 stand rejected as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

From the comments on page 4, lines 6-10, of the Office Action, Applicants understand the Examiner's position to be that the phrase "an amount effective to counteract said inhibition" is indefinite because it fails to specify a state or function that is to be achieved in order to be considered effective. Applicants respectfully submit that it is clear from this phrase and the preamble of the claim (to which, by use of the word "said", the phrase refers) that the function to be achieved in order to be effective is suppression of the inhibition of neuronal axon growth. Nevertheless, in order to expedite prosecution of the instant application, Applicants have incorporated this phrase into the body of the claim.

From the comments on page 4, lines 11-15, of the Office Action, Applicants understand the Examiner's position to be that it is unclear in claim 32 whether the phrase "directly to a . . . (PNS) lesion site" refers to the delivering step, the inhibition, or determination of the effective amount. Applicants respectfully submit that it is clear from the punctuation of the claim that the phrase refers to the delivery of ADP-ribosyl transferase C3. Nevertheless, in order to expedite prosecution of the instant application, Applicants have amended the claim to further clarify this by moving the phrase "in an amount effective to suppress inhibition neuronal axon growth" to the end of the claim.

In light of the above considerations, Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. §112, second paragraph.

The 35 U.S.C. §102 rejections

(a) Claims 32 and 33 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Dillon et al.

From the comments on page 5, lines 7-12, of the Office Action, Applicants understand the Examiner's position to be that Dillon et al. discloses administration of C3 transferase to neuronal cells of a subject and thereby anticipates the instant claims. Applicants disagree with this position. Dillon et al. discloses adding a C3 transferase to lysates of various cells and not to

cells in order to detect Rho family proteins in such lysates (page 179, last paragraph, to page 182, first paragraph). The instant claims require that the C3 transferase be delivered directly to a CNS or a PNS lesion. Applicants respectfully submit that the addition of a substance to a cell lysate *in vitro* is not the same as delivery of that substance to a tissue lesion. To even further distinguish the instant claims from the disclosure of Dillon et al., claim 32 has been amended by the addition of the phrase "in a patient" after both occurrences of the term "lesion site". This amendment is supported by the specification, e.g., at page 14, lines 3-21.

(b) Claims 32-33 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Jin et al.

From the comments on page 5, lines 15-21, of the Office Action, Applicants understand the Examiner's position to be that in disclosing addition of C3 transferase to neurons *in vitro*, Jin et al. anticipates the instant claims. Applicants respectfully disagree with this position. Applicants submit that the addition of a substance to cells *in vitro* is not the same as delivery of that substance to a tissue lesion. In addition, the above-described amendment to claim 32 serves to further distinguish the instant invention from the disclosure of Jin et al.

(c) Claims 32-33 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Liao et al. and by Johnson et al. Applicants respectfully traverse this rejection.

In view of the establishment of the priority date of the instant application by submission of the enclosed certified copy of Canadian application no. 2,214,841, Liao et al. is not prior art with respect to the instant application.

From the comments on page 6, line 14, to page 7, line 2, of the Office Action, Applicants understand the Examiner's position to be that Johnson et al., in disclosing administration of Botulinum C3 exoenzyme to a subject, inherently anticipates the instant claims. Applicants disagree with this position. There is no teaching in Johnson et al. that a subject to whom the C3 exoenzyme is delivered have a CNS or a PNS lesion. While such a subject could have such a lesion, he or she would not necessarily have one. The Examiner is reminded that

[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of

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that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28  
USPQ2d 1955, 1957 (Fed. Cir. 1993) (emphasis in original).  
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In light of the above considerations, Applicants respectfully request withdrawal of the  
rejections under 35 U.S.C. §102.

Attached is a marked-up version of the changes being made by the current amendment.

### CONCLUSION

In summary, for the reasons set forth above, Applicants maintain that the pending claims  
patentably define the invention. Applicants request that the Examiner reconsider the rejections  
as set forth in the Office Action, and permit the pending claims to pass to allowance.

If the Examiner would like to discuss any of the issues raised in the Office Action,  
Applicants' undersigned representative can be reached at the telephone number listed below.

Enclosed is a Petition for an Extension of Time with the required fee. Please charge any  
other fees or make any credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 10/19/01



Stuart Macphail, Ph.D.  
Reg. No. 44,217

Fish & Richardson P.C.  
45 Rockefeller Plaza, Suite 2800  
New York, New York 10111  
Telephone: (212) 765-5070  
Facsimile: (212) 258-2291

**Version with markings to show changes made**

In the claims:

Claims 32 and 33 have been amended as follows:

32. (Amended) A method of suppressing the inhibition of neuronal axon growth, the method comprising delivering ADP-ribosyl transferase C3[, in an amount effective to counteract said inhibition,] directly to a central nervous system (CNS) lesion site in a patient or to a peripheral nervous system (PNS) lesion site in a patient, wherein the ADP-ribosyl transferase C3 is delivered in an amount effective to suppress inhibition of neuronal axon growth.

33. (Twice amended) The method of claim [33] 32, wherein said ADP-ribosyl transferase C3 is selected from the group consisting of ADP-ribosyl transferase derived from *Clostridium botulinum* and a recombinant *Clostridium botulinum* ADP-ribosyl transferase.